

CLAIM AMENDMENTS

1-16 (canceled)

17. (Currently amended): A composition of matter which consists of a plugged stratum comprising a permeable stratum treated with a biofilm which comprises an elastic exopolysaccharide which exopolysaccharide is the exopolysaccharide produced by a bacterium which has the characteristics that it is Gram negative, bacilliary, about 0.2X0.8 μm , facultative anaerobe, grows between 15° and 45°C with a temperature optimum of 37°C, grows between pH 4-11 but not at pH 2, grows in AB13 medium or minimal medium, is motile, lacks a capsule, and lacks spores.

18. (Currently amended): The composition plugged stratum of claim 17, wherein the permeable stratum is an open conduit.

19. (Currently amended): The composition plugged stratum of claim 17, wherein the plugged permeable stratum comprises is a subsurface cutoff wall.

20. (Currently amended): The composition plugged stratum of claim 17, wherein the plugged permeable stratum is a subsurface liner of compacted soil.

21. (Currently amended): The composition plugged stratum of claim 17, wherein the plugged permeable stratum includes is a geotextile.

22. (Currently amended): The composition plugged stratum of claim 17, wherein the plugged stratum has a saturated hydraulic conductivity equal to or less than 1.0×10^{-7} cm/sec.

23. (Currently amended): The composition plugged stratum of claim 17, wherein the plugged stratum has a saturated hydraulic conductivity equal to or less than 1.5×10^{-8} cm/sec.

24. (Currently amended): The composition ~~plugged-stratum~~ of claim 17, wherein said bacterium further comprises the characteristics of an antibiotic sensitivity profile as in Table 2, a biochemistry profile as in Table 3, and a carbon utilization profile as in Table 4.

25. (Currently amended): The composition ~~plugged-stratum~~ of claim 24, wherein the bacterium is that deposited as ATCC No. PTA2500.